REMARKS

In the Office Action mailed February 10, 2005, the claims of the present application were rejected under 35 U.S.C. §101 because it is the Examiner's belief that the claimed invention are directed to non-statutory subject matter. The Examiner will please note that the preamble to claim 1 has been amended to clearly recite that it is a method composed of definite steps leading to a useful, concrete and tangible result. In addition, the Examiner's attention is directed to the prior art patents of record, which all claim inventions directed to the same general subject matter as the present invention, and which were obviously determined to claim statutory subject matter. For these reasons, Applicant respectfully requests the Examiner to withdraw the 35 U.S.C. §101 rejection of the claims of the present application.

Claims 1-6 have also been rejected under 35 U.S.C. §103(a) as being unpatentable over Kaufmann in view of Graham and further in view of Craven. For the reasons that follow, Applicant respectfully traverses this ground for rejecting claims 1-6.

Using Kaufmann, Graham, and Craven in a combination, what kind of tournament will result from this combination? It will look very similar to the NCAA men's basketball tournament, where "all of the teams or players in the event are initially broken into a number of groups each containing a nearly equal number of teams or players" [Kaufmann: FIG.1, ln. (3-5)] and the size of these groups will be diminishing by half after each round until each group has one team or player. Each of these groups will compete in round after round until one team or player is left, and then they will unite to form one last group in order to determine one champion. A pair wise ranking system is used within each group providing "a mechanism whereby the team with the best record coming into the tournament has the advantage of playing the worst teams

throughout the bracket."[Graham: (0059) In. (9-12)] Kaufmann, Graham, and Craven want to provide a tournament that will determine one champion coming from a group or groups of participants.

Applicant's method is to start with a group of ranked players and then separating the ranked players into groups of similar ranking because it is totally unfair to expect the lowest ranked player to compete against the highest ranked player. This tournament is a reward to all 100% of league bowlers. It is a thank you for your business from the proprietor to the league bowler and the more division champions the better. These groups will never reunite again to determine one champion but will compete until each group determines a champion of its own. Within each group there will never be any pair wise ranking because the players within the group will already be of similar ranking. Applicant's method is far more complex than Kaufmann, Graham, and Craven taken individually or collectively.

Using the NCAA men's basketball tournament format with bowling averages as a means of ranking and using 32 participants instead of 64, it is possible to show the differences between a combination of Kaufmann, Graham, and Craven as opposed to Applicant's claimed invention. Starting with a group of 32 bowlers who are all ranked by their average, the Kaufmann, Graham, and Craven tournament would have the 32 bowlers broken into 4 groups with 8 bowlers in each group. Each of these groups would have the bowlers within each group pair wise ranked. The group that has 32 bowlers who are all ranked by their averages. These 32 averages are 229, 226, 225, 224, 222, 221, 217, 215, 199, 198, 195, 193, 189, 188, 188, 185, 167, 166, 166, 162, 159, 158, 157, 157, 138, 137, 135, 134, 130, 129, 128, and 125. The 32 bowlers would be broken into four groups with each group pair wise ranked with the best team playing the worst in the first game. The initial pair wise rankings for the 8 bowlers in group A are #1 ranked: 229 average

bowler plays #32 ranked: 125 average bowler with the winner playing the winner of the match between #16 ranked: 185 average bowler and #17 ranked: 167 average bowler. The next bracket in group A has four bowlers competing and they are pair wise ranked. The #8 ranked: 215 average bowler plays the #25 ranked: 138 average bowler with the winner playing the winner of the match between #9 ranked: 199 average bowler and #24 ranked: 157 average bowler. The #1 ranked: 229 average bowler easily wins group A by beating the #25 ranked: 138 average bowler in the first round match, the #16 ranked: 185 average bowler in the second round match, and the#8 ranked: 215 average bowler in the third round match. The #4 ranked: 224 average bowler from group B, the #2 ranked: 226 average bowler from group C, and the #3 ranked: 225 average bowler from group D all won their groups in a similar way as the #1 ranked bowler from group A. The winners from groups A, B, C, and D are pair wise ranked in one final group with #1 ranked: 229 average bowler playing the #4 ranked: 224 average bowler with the winner of this match playing the winner from the match between the #2 ranked: 226 average bowler and the #3 ranked: 225 average bowler in order to determine the one true champion.

Applicant's use of the same 32 bowlers will be entirely different than the combination of Kaufmann, Graham, and Craven. Applicant will rank the group of bowlers from #1 to #32 and evaluate the best competitive fair way to separate them into 4 groups or more with the absolute intention of having 4 or more different champions. Applicant will not have any need to have pair wise ranking within any of the groups because of competitive balance within each and every group. The 32 ranked bowlers would be separated into 4 groups. These are the 4 groups in group A are the #1 ranked: 229 average bowler, #2 ranked: 226 average bowler, #3 ranked: 225 average bowler, #4 ranked: 224 average bowler, #5 ranked: 222 average bowler, #6 ranked: 221 average bowler, #7 ranked: 217 average bowler, and #8: 215 average bowler. The group B

average bowlers are #9 ranked: 199, #10 ranked: 198, #11 ranked: 195, #12 ranked: 193, #13 ranked: 189: #14 ranked: 189, #15 ranked: 188, and #16 ranked: 185. The group C average bowlers are #17 ranked: 167, #18 ranked: 166, #19 ranked: 166, #20 ranked: 162, #21 ranked: 159, #22 ranked: 158, #23 ranked: 157, and #24 ranked: 157. The group D average bowlers are #25 ranked: 138, #26 ranked: 137, #27 ranked: 135, #28 ranked: 134, #29 ranked: 130, #30 ranked: 129, #31 ranked: 128, and #32 ranked: 125. Each division will have a random drawing in order to determine the matches of the eight-bowler bracket in each division. Because of the competitive balance and the random match-ups in each division any of the bowlers could win their respective division.

Kaufmann, Graham, and Craven have the intention of determining one champion. Whether they have one initial group or several initial groups they always intend to unify the group or groups so that one champion is determined as the last result. Even though Kaufmann separates the players into winners bracket or group and losers bracket or group the intention is to unify into one last group in order to determine a champion: "Lastly the four players from the winners bracket, and the single player from the losers bracket, play in a championship bracket to determine the winner of the event." [COL. 2, ln. 36-38] Graham describes both a single elimination and a double elimination where once again there is a winners bracket or group and a losers bracket or group where the intended result will be to unify in order to determine a champion. "In a single elimination bracket, once a team loses, it is eliminated from further competition" ([0059], ln. 2-5) "Only the winners advance to the next round until a champion is chosen." ([0059], ln. 2-5). And "If the winner of Game 3 prevails over the winner of Game 5, the loser will have lost twice and therefore be eliminated and the winner will be champion." ([0060], ln. 16-19) Craven describes a playoff system with qualifying subsets or groups that

unify to determine the undisputed champion: " it determines an undisputed champion" [0042]; "conducting a championship tournament in which a selected number of teams whose ranking is higher than the highest ranked member of the selected subset plays against a selected number of winning teams from the qualifying round in a single elimination format until only one team remains undefeated in the championship tournament;" [0046] and " and further wherein the one undefeated team in the championship tournament is determined to be the national champion." [0048]

Pair wise ranking needs to be examined in order to define its meaning and use in context with the combination of Kaufmann, Graham, and Craven. Graham teaches "pair wise rankings is a method of ranking teams based on how well they played against other teams"([0046], In. 7). However, Graham further elaborates, " In general, the ranking system provides a mechanism whereby the team with the best record coming into the tournament has the advantage of playing the worst teams throughout the bracket. Those teams at the bottom of the ranking must win against the best teams to advance, providing an incentive to perform well during the regular season prior to the tournament."([0059] FIG. 4, In. 9-15) And " the teams are seeded similarly to the example of a single elimination bracket, with the best team playing the worst in the first game."([0060] FIG. 5, In. 5-7) The best or highest ranked tournament participants have earned the advantage of playing the worst or lowest ranked tournament participants from the initial grouping throughout the entire tournament and/or bracket. Rather than have the highest ranking participants compete against opponents of similar rankings, they deserve the advantage of competing against the worst or lowest ranking participants because of their superior regular season play that establishes their high ranking, while it also gives an incentive for the worst or lowest ranking participants to make improvements for future tournament participation.

Craven strengthens this meaning and use of pair wise ranking "placing a selected subset of the eligible college football, in a qualifying round, in which each team whose ranking is in the upper half of the selected subset plays a team whose ranking is in the lower half of the subset; [0045], " wherein a selected number of the highest ranked teams in the upper half of the selected subset that win their game against a lower ranked team advances to the championship;" [0047], "conducting a qualifying tournament with one or more brackets in which each competitor ranked in the top half of a qualifying tournament bracket plays a lower ranked competitor in the qualifying tournament bracket;" [0054], and " seeding the highest ranked competitor from each bracket in the qualifying tournament that wins a contest against a lower ranked opponent into the single elimination playoff bracket;" [0063] from these statements.

Kaufmann does not have any pair wise ranking or any ranking system whatsoever since there is no pair wise competition at all. Kaufmann eliminates all of the weaker players early by separating the top half scores into a winners bracket and the lower half scores into a losers bracket after the first round game. Since each succeeding round has only the top half scores advancing in both the winners and losers bracket only the best will continue to advance in an exponential way in each succeeding round [round one: top half, round two: top quarter, round three: top eighth, etc., & c.]. Kaufmann's tournament favors the best players. Kaufmann's grouping is arbitrary and totally random. The proof is that it is not part of his claim on page 8 claim 1, line 3-6, "ascertaining the number of players for the tournament: determining from the number of players the number of rounds to be played in a winners bracket and a losers bracket; the players playing an initial game." The groupings in the initial game is relevant only in terms of the number of rounds and in order to maintain groups of approximately the same number of players. All of the players in the initial group are treated equally and there is no ranking of talent

level so there is a random drawing in all of the groupings. The only reason to have the players in groups in the first round is because of the size of the facility being used to run the tournament. If the facility is large enough to run the tournament, then one group is sufficient: "The players advancing to the winners bracket are again grouped into at least one group, where multiple groups contain nearly the same number of players."[FIG.1, PAR.2]

Graham teaches "pair wise rankings is a method of ranking teams based on how well they played against other teams" ([0046], In. 7). However, Graham also teaches, "In general, the ranking system provides a mechanism whereby the team with the best record coming into the tournament has the advantage of playing the worst teams throughout the bracket" ([0059], In 9), and "the teams are seeded similarly to the example of a single elimination bracket, with the best team playing the worst in the first game."([0060], In 5-7) Even with pair wise rankings the tournament format is to have the highest ranked team or player paired against the lowest ranked team or player throughout all of the brackets, "the first placed seed plays the fourth ranked seed, and the second place seed plays the third ranked seed." Graham [FIG.4] ([0059], In 5-7) or #1 against #8, #4 against #5, #2 against #7, and #3 against #6; etc.

Craven teaches the same format for conducting a tournament, "conducting a qualifying tournament with one or more brackets in which each competitor ranked in the top half of a qualifying tournament bracket plays a lower ranked competitor in the qualifying tournament bracket." ([0054], In 1) In Craven's first claim the same format for conducting a tournament is stated, "A method of determining a college football national champion comprising the steps of: obtaining a final regular season ranking of the eligible college football teams in which the eligible teams receive numerical ranking from highest to lowest; placing a selected subset of the eligible teams in a qualifying round, in which each team whose ranking is in the upper half of the

selected subset plays a team whose ranking is in the lower half of the selected subset." Both Graham and Craven teach that high ranking teams or players have earned the right to play low ranking teams or players early in tournament play so that the highest ranking teams or players will not knock-out each other, thus making it more likely that the best teams or players will win or play in the latter rounds.

Kaufmann, Graham, and Craven all three intend to find the one true champion, and even when they have multiple groups they reunite the groups later to form one group in order to find the one true champion. Like the NCAA men's basketball tournament where there is an eligible group of teams [64 teams] chosen to play in four different regions or "initially broken into a number of groups" with 16 teams in each region or group having pair wise rankings "whereby the team with the best record coming into the tournament has the advantage of playing the worst teams throughout the bracket." Graham ([0059], ln 10-12) The 16 teams in each group are ranked #1 thru #16 with #1 playing #16 and #8 playing #9 with the winner of these two games playing each other in the second round, #4 playing #13 and #5 playing #12 with the winner of these two games playing each other in the second round, #2 playing #15 and # 7 playing #10 with the winner of these two games playing each other in the second round, and #3 playing #14 and #6 playing #11 with the winner of these two games playing each other in the second round. The winner from the bracket with the #1, #16, #8, and #9 first and second games plays the winner from the bracket with the #4, #13, #5, and #12 first and second round games in the third round game and the winner from the bracket with the #2, #15, #7, and #10 first and second round games plays the winner from the bracket with the #3, #14, #6, and #11 first and second round games in the third round game. The fourth round game will have the winner from the bracket with the #1, #16, #8, #9, #4, #13, #5, and #12 playing the winner from the bracket with the #2,

#15, #7, #10, #3, #14, #6, and #11 in order to decide the winner of each of the four regions or groups. These four region or group winners play each other with the group A winner playing the group B winner and the group C winner playing the group D winner in the fifth round. The winner from the group A against group B game plays the winner from the group C against group D winner to determine the one true champion of the tournament. Even with a random drawing of the 64 teams ranked #1 thru #64 and broken into 4 different groups without pair wise ranking the final result will be one true champion coming from this tournament method. The only difference will be random pair wise matches, but it will still have matches with the highest ranked teams playing the lowest ranked teams and the same result will be one true champion coming from this method. Pair wise ranking is used in tournament play to insure that the highest ranked teams don't play each other in the early rounds. Tournaments do not want the #1 ranked team having to beat the #2 ranked team in the first round, the #3 ranked team in the second round, the #4 ranked team in the third round, while possibly playing the #59 ranked team in the championship match because the #59 ranked team beat the #60, #61, #62, #63, and the #64 ranked teams in the first five rounds.

Using the same 64-team example with Applicant's claimed method, one will get an entirely different result. There is an initial group of 64 bowlers broken into 4 groups. All 64 bowlers are ranked from #1 to #64, and then they are broken into 4 groups with 16 bowlers in each group. Applicant's claimed method would be to separate the top 16 ranked bowlers into group A [#1-#16], the next highest ranked 16 bowlers would be placed in group B [#17-#32], followed by the next highest ranked 16 bowlers who would be placed in group C [#33-#48], and the lowest ranked 16 bowlers would be placed in group D [#49-#64]. Applicant's claimed method will have 4 different champions with one coming from each group A, B, C, & D not only

is it different with 4 champions compared to 1 champion from Kaufmann, Graham, and Craven. Applicant's claimed method is very different in how each group competes within the group in order to determine their champion. Unlike Graham's pair wise ranking "whereby the team with the best record or ranking coming into the tournament has the advantage of playing the worst teams throughout the bracket," Applicant's claimed method is to randomly draw the pair wise matches because the groupings have already been separated by ranking and/or talent level. All of the groupings are as competitively equal as possible so that in the 15-pin average division or grouping a match between a 170 average bowler and a 184 average bowler might occur, but it is 15 times more likely that a match between two bowlers of equal average will occur. Applicant's claimed method is to have the most competitive matches throughout the entire division or grouping while insuring that there won't be too many divisions or groupings of the total prize fund to make it undesirable to run the tournament. Using the 64-team tournament once again, there could be more than 4 groupings in order to have the most competitive tournament however there is not a sufficient amount of information to make this evaluation.

The purpose of Applicant's invention is to have a national bowling tournament in which 100% of league bowlers would participate in order to reverse the declining league membership that has occurred over the last 20 years. The national league membership has declined from 9 million to 2.5 million over the last 20 years and from 3.2 million to 2.5 million in the last two years. The obvious choice for Applicant was to find the one true champion by using handicap in the national bowling tournament in order to artificially even out the vast difference in averages between all of the bowlers, but using handicap is flawed. There is no handicap percentage and/or base that can satisfy all league bowlers in its fairness. Without the use of handicap only the highest average bowlers would enter the tournament. Therefore a new tournament format is

needed. Because bowling is the most quantitative of all sports with league averages being accurately established each season, it is easy to rate all league bowlers. In order to get low average bowlers to enter they must have a fair chance to compete. The best way to give the low average, and for that matter even the middle average, bowlers a fair chance to compete is to have them not compete against the high average bowlers, which means establishing average divisions so that low, medium, and high average bowlers can compete fairly only within their divisions. However, divisional tournament bowling means dividing the total prize fund into multiple fractions that will not allow the tournament to succeed unless a huge number of participants compete. The prize fund will be too small to entice enough tournament participation.

Bowlers always question scores bowled at different times, therefore it is better to have a one on one format. All scratch tournaments tend to attract the highest average bowlers, which is about 1% of all bowlers, because the other bowlers cannot compete at their level of expertise. All leagues and tournaments that are not scratch use a handicap system to equalize the competition. The handicap system will take a percentage of the difference between two averages and the bowler with the lowest average will get to use this percentage difference as additional handicap. [(EXAMPLE) 190-150=40...40x90%=36] The 150 average bowler will get to use 36 pins of handicap in the match against a 190 average bowler. The other way of figuring handicap is to set a scratch score higher than the entering average of any bowler in the league or tournament and decide on the percentage to be used for computing handicap. In the following example, 90% of 200 is used. (EXAMPLE) Rose has a 140 average. In order to figure her handicap throughout the tournament, you subtract 140 from 200 to get the difference of 60 (200-140=60), then you multiple the difference by 90% (60x90%=54). Rose will get to use 54 pins handicap throughout the tournament.

Herein lies the problem with using handicap in a one game single elimination tournament. Since bowling has a limited high game score of 300, using handicap in a one game single elimination tournament is not fair to the highest average bowlers. If a bowler has an entering average of 240, 60 pins is the most pins over their average that they can bowl, which is only 25% above their average. (300-240=60: 60/240=25%) If a bowler has an entering average of 150, 150 pins is the most pins over their average that they can bowl, which is 100% above their average. (300-150=150; 150/150=100%) What this means is that no matter how perfect a high average bowler is bowling in a game, they will not be able to win against a lower average bowler who could be far less perfect while they are bowling their game. (EXAMPLE) Since the highest league average is 261, the tournament uses 260 as the scratch figure and a 90% rate for computing handicap for all the tournament bowlers. If Bob has a 240-league average then he gets 18 pins in handicap per game. (260-240=20; 20x90%=18) If Tom has a 150-league average then he gets 99 pins in handicap per game. (260-150=110; 110x90%=99) If they bowl each other with Bob shooting a perfect game of 300 while Tom shoots a 220 game then Bob's score is 300+18=318 and Tom's score is 220+99=319 with Bob losing the match while shooting the highest game possible in bowling. Bob is 25%(300-240=60; 60/240=25%) over his average and Tom is 46.66%(220-150=70; 70/150=46.66%) over his average. Bob cannot bowl a higher game while Tom can bowl even more pins over his average. This is why high average bowlers do not like handicap tournaments.

The other problem with using handicap in a one game single elimination format is the advantage high average bowlers get when using less than 100% handicap. What if both bowlers bowl a score that is exactly their average with 90% handicap? (EXAMPLE) Using Bob's 240 average with 18 pins handicap and Tom's 150 average with 99 pins handicap, if they both bowl

exactly their average in a their match, then Bob will win with a score of 240+18=258 against Tom's 150+99=249. The handicap system works fine in league bowling because there is a more social fun atmosphere, but in a tournament with a large money prize fund, something else needs to be used while maintaining an equal competition for all the bowlers no matter the varying degrees of skill and talent.

Since 100% handicap exacerbates the disadvantage to high average bowlers a new tournament format needed to be found that will still maintain an equal competition for all bowlers no matter the varying degrees of skill and talent. Why not accept the fact that there is no fair way for a 250 average bowler to compete against a 125 average bowler? Why not separate all bowlers in as precise ways as possible maintaining an equal competition while maintaining as, large a first place prize? This would mean separating all the bowlers into average divisions and never bowling anyone out of their division. Since the bowlers will be separated into average divisions there will be no need to use handicap during match play. Since all match play will be scratch it will be vitally important to maintain as equal and fair a competition as possible.

What will the criteria be for the best sizes in the average divisions? The first criteria will be to have as equally competitive match play as possible. The second criteria will be to have as few average divisions as possible. The third criteria will be to keep the average divisions in the same tenths' as possible because bowlers who average 160, 164,165, or 169 think of themselves as being a bowler who averages in the 160's. The fourth criteria will be to have the average divisions as easy to remember as possible.

There are only two average divisions with similar advantages and yet significant differences that make them the best to use. The 10-pin average division is very competitive with 72.72% of all bowlers competing within 0 to4 pins of each other and 100% of all bowlers

competing within 0 to9 pins of each other. All of the divisions are in the same tenths' and start and end with only one last digit making it the easiest division for the bowlers to know and remember where their average division is located. The 15-pin average division is not quite as competitive with 54.17% of all bowlers competing within 0 to 4 pins of each other and 87.5% of all bowlers competing within 0 to 9 pins of each other meaning only 1 in every 8 matches are within 10 to 14 pins. All of the divisions are in two different tenths' which could cause some bowlers to believe it is not competitive enough and it is on the competitive edge. But with over 50% of all matches within 0 to 4 pins and close to 90% of all matches within 0 to 9 pins, it is still competitive enough. In addition 58.33% (70/120=58.33%) of all the matches are in the same tenth. All of the divisions start and end with only two different last digits making it easy for bowlers to know and remember where there average division is located. The 10-pin average division is better than the 15-pin average division based on these criteria however the 10-pin has more divisions than the 15-pin. For each additional division within the 10-pin average division compared to the 15-pin average division there is an approximate 1 million dollar extra expense. Each of the 512 regional competitions will have close to 128 bowlers competing in a scratch single elimination format until one bowler wins that region resulting in about 254 games bowled at each regional site costing the tournament $4 per game times the 254 games equaling $1016 paid to each regional bowing center. Since there are 512 regional locations in each division, the tournament cost would be approximately 512 times the $1016 equaling $520,192. Each regional winner receives an all expensed paid trip to the national championship location costing approximately $1000 for plane travel, hotel room for 3 days/4 nights, 3 meals per day. The tournament cost would be 512 times the $1000 per regional winner equaling about $512,000, resulting in a cost of about $520,192 plus $512,000 equaling $1,032,192 for each additional

division. There will also be an unknown expense at this time for running each and every division in paid hourly manpower therefore each additional division will lower the paid out prize fund. Since there is a minimum of 8 divisions in the 15-pin average division from 124 or less to 215 or more, each additional division will have to lower the paid out prize fund for the first place winner to five hundred and twelfth place winner by about 10 percent. Because of the preceding factors the 15-pin average division is slightly better than the 10-pin average division. If the size of the prize fund isn't a major factor than the 10-pin average division is best.

The 5,6,7 and 8 pin average divisions all have too many divisions. The 9,11 and 12 pin average divisions are similar to the 10-pin in competitiveness and the number of divisions but they are not as good in terms of ease of division remembrance. Even though the 11-pin is easier to remember than the 9-pin or 12-pin it is not as good as the 10-pin because all of its divisions are in two different tenths'. The 11-pin average division is the third best average division but there is no good reason to use it ahead of the 10-pin. The 9-pin and 12-pin have too many divisions in two tenths' and they are harder to remember than the 10-pin. The 13, 14, 16, 17 and 18 pin average divisions are similar to the 15-pin in competitiveness and the number of divisions but they fail in terms of too many divisions in three different tenths' and it is to hard to remember where their divisions are located. The 13, 14, 16, 17 and 18 pin average divisions fail against the 10-pin in everything except the number of divisions in each average division. Since the 13, 14, 16, 17 and 18 pin average divisions have all of their divisions in two different tenths' with some divisions even in three different tenths' and it is to hard to remember where their divisions are located compared to the 10-pin 15-pin average divisions, making it very easy to rate the 10-pin average division above the 13, 14, 16, 17 and 18 pin average divisions. The 19-pin and 20-pin average divisions are not competitive enough, making them the weakest of all.

The eight-bowler bracket in the first round is best because it will create about 128 bowlers qualifying in the regional round per division. This is important because the regional round can be concluded in possibly one day and at most two days. The same bowlers qualifying in the regional could be traveling from one hundred to several hundred miles away from the regional site. The quicker the regional round can be concluded the less the inconvenience for those traveling qualified bowlers in terms of expense like a motel overnight stay rather than a two night stay. With 128 qualified bowlers the regional winner will have to win 7 consecutive matches, which is very close to the maximum number of games bowled in a day most amateurs can handle without too much stress. If the first round had the winner of a single game match between two competing bowlers qualifying for the regional round than there would be four to five hundred bowlers qualifying to compete in the regional round in each division and that would be way too many bowlers competing in the regional round. If the first round had a four-bowler bracket then the qualifier would bowl just two games in their home-bowling center while this would cause the regional round to add another game in order to qualify for the championship round. It is better to add an extra game of qualifying to the round where it takes two games to qualify rather than the round that already takes seven games to qualify. The 16-bowler bracket does not qualify enough bowlers to advance to the regional round and too many small bowling centers will not even have enough bowlers fill a 16-bowler bracket in many of their higher average divisions.

It is true that all tournaments require a paid entry, but it is who has control of how it is paid that makes this tournament unique and not so obvious. Proprietors can have the national tournament fee combined with their daily cost of bowling fee without consulting each leagues board of directors, which consists of the officers and the team captains. Since most leagues have

teams with 4 or 5 members with one member from each team on the board of directors, 10% to 12.5% of each league membership will be sufficient in order to add the national tournament fee to the league rules. This would assure 100% participation in the tournament by the league bowlers. By having the 2.5 million league bowlers pay their tournament entry fee through their league, the over 4000 bowling center proprietors will have the greatest controlling influence on tournament participation. Proprietors will determine whether all of their leagues will participate in the tournament with assistance from each leagues board of directors. Proprietors and league secretaries have the most influence on league decisions. Every new league season starts with the league officers and all of the team captains having a league meeting in order to determine all of the league rules before the season begins. One of the league rules governs the paying of fees. This rule states, "The amount to be paid by each bowler each night shall be $------, of which $------will cover the cost of bowling, with the balance to be placed in the league treasury." The fees are for cost of bowling paid to the proprietor and a prize fund paid out at the end of the league season. By adding an extra line stating that there will be an additional fee paid to a national tournament prize fund, all of the league bowlers will be in the national tournament if over 50% of the league officers and team captains vote in favor of this additional line.

In order to evaluate all the possible average divisions they all need to have the same high and low average as much as possible. Because the evaluation does not need to be as realistic as the actual tournament, the 15 pin average division will have two additional divisions for the sake of equal comparisons. All of the average divisions will have the highest average division be 230 or more and the lowest average division will be 109 or less. There will also be the assumption that there is an equal distribution of bowlers within each average division. This is due to the fact

that we're dealing with 2.5 million league bowlers bowling from 21 to over 100 games per league establishing a league average.

These are all of the possible match combinations in the 15-pin average division for the 170 to 184 division. The 15-pin average division would have 15 matches with a zero-pin difference in the 170 to 184 division: 170-170, 171-171, 172-172, 173-173, 174-174, 175-175, 176-176, 177-177, 178-178, 179-179, 180-180, 181-181, 182-182, 183-183, 184-184. There are 14 matches with a one-pin difference: 170-171, 171-172, 172-173, 173-174, 174-175, 175-176, 176-177, 177-178,178-179, 179-180, 180-181, 181-182, 182-183, 183-184. There are 13 matches with a two-pin difference: 170-172, 171-173, 172-174, 173-175, 174-176, 175-177, 176-178, 177-179, 178-180, 179-181, 180-182, 181-183, 182-184. There are 12 matches with a three-pin difference: 170-173, 171-174, 172-175, 173-176, 174-177, 175-178, 176-179, 177-180, 178-181, 179-182, 180-183, 181-184. There are 11 matches with a four-pin difference: 170-174, 171-175, 172-176, 173-177, 174-178, 175-179, 176-180, 177-181, 178-182, 179-183, 180-184. There are 10 matches with a five-pin difference: 170-175, 171-176, 172-177, 173-178,174-179, 175-180, 176-181, 177-182, 178-183, and 179-184. There are 9 matches with a six-pin difference: 170-176, 171-177, 172-178, 173-179, 174-180, 175-181, 176-182, 177-183, and 178-184. There are 8 matches with a seven-pin difference: 170-177, 171-178, 172-179, 173-180, 174-181, 175-182, 176-183, and 177-184. There are 7 matches with an eight-pin difference: 170-178, 171-179, 172-180, 173-181, 174-182, 175-183, and 176-184. There are 6 matches with a nine-pin difference: 170-179, 171-180, 172-181, 173-182, 174-183, and 175-184. There are 5 matches with a ten-pin difference: 170-180, 171-181, 172-182, 173-183, and 174-184. There are 4 matches with an eleven-pin difference: 170-181, 171-182, 172-183, and 173-184. There are 3 matches with a

twelve-pin difference: 170-182, 171-183, and 172-184. There are 2 matches with a thirteen-pin difference: 170-183and 171-184. There is 1 match with a fourteen-pin difference: 170-184.

The 5-pin average division is extremely competitive with 100% of all bowlers competing within 0 to 4 pins of each other and all bowlers would be in the same tenths' however the 26 average divisions would be way too many divisions dividing the total prize fund. All of the divisions are in the same tenths'. All of the divisions start (0,5) and end (4,9) with only two different last digits making it less difficult for the bowlers to remember where their average division is located. (EXAMPLE) In the 160 to 164 average-division there are 5 matches with a zero-pin difference in their average competing against each other. (160 against 160, 161 against161, 162 against 162, 163 against 163, and 164 against 164) There are 4 matches with a one-pin difference in their average competing against each other. (160 against161, 161 against 162, 162 against 163, 163 against 164) There are 3 matches with a two-pin difference in their average competing against each other. (160 against 162, 161 against 163, 162 against 164) There are 2 matches with a three-pin difference in their average competing against each other. (160 against 163 and 161 against 164) There is 1 match with a four-pin difference (160 against 164) in their average competing against each other adding to a total of 15 matches. [5(5+1)/2=15] There are 15 matches within a 0 to4 pins difference (5+4+3+2+1=15) which is 100% (15/15=100%) of all the matches. (EXAMPLE) The 26 average divisions are 109 or less, 110 to 114, 115 to 119, 120 to 124, 125 to 129, 130 to 134, 135 to 139, 140 to 144, 145 to 149, 150 to 154, 155 to 159, 160 to 164, 165 to 169, 170 to 174, 175 to 179, 180 to 184, 185 to 189 190 to 194, 195 to 199, 200 to 204, 205 to 209, 210 to 214, 215 to 219, 220 to 224, 225 to 229, and 230 or more.

The 6-pin average division is still very competitive with 95.23% of all bowlers competing within 0 to 4 pins of each other however eight divisions are in two different tenths'

and the 22 average divisions are way too many divisions dividing the prize fund. All of the divisions start (0,6,2,8,4) and end (5,1,7,3,9) with five different last digits making it more difficult for the bowlers to remember where their average division is located. (EXAMPLE) In the 200 to 205 average division there are 6 matches with a zero-pin difference, 5 matches with a one-pin difference, 4 matches with a two-pin difference, 3 matches with a three-pin difference, 2 matches with a four-pin difference, and 1 match with a five-pin difference adding to a total of 21 matches. [6(6+1)/2=21] There are 20 matches within a 0 to 4 pins difference (6+5+4+3+2=20) which is 95.23% (20/21=95.23%) of all the matches. The eight divisions that are in two different tenths' are (116 to 121, 128 to 133, 146 to 151, 158 to 163, 176 to 181, 188 to 193, 206 to 211, and 218 to 223). The 22 average divisions are 109 or less, 110 to 115, 116 to 121, 122 to 127, 128 to133, 134 to 139, 140 to 145 146 to 151,152 to 157, 158 to 163, 164 to 169, 170 to 175, 176 to 181, 182 to 187, 188 to 193, 194 to 199, 200 to 205, 206 to 211, 212 to 217, 218 to 223, 224 to 229, and 230 or more.

The 7-pin average division is still very competitive with 89.29% of all bowlers competing within 0 to 4 pins of each other however ten divisions are in two different tenths' and the 19 average divisions are too many divisions dividing the prize fund. All of the divisions start (0,7,4,1,8,5,2,9,6,3) and end (6,3,0,7,4,1,8,5,2,9) with ten different last digits making it more difficult for the to remember where their average division is located. (EXAMPLE) In the 110 to 116 average-division there are 7 matches with a zero-pin difference, 6 matches with a one-pin difference, 5 matches with a two-pin difference, 4 matches with a three-pin difference, 3 matches with a four-pin difference, 2 matches with a five-pin difference, and 1 match with a six-pin difference adding to a total of 28 matches. [7(7+1)/2=28] There are 25 matches within a 0 to 4-pins difference (7+6+5+4+3=25) which is 89,29%(25/28=89.29%) of all the matches. The ten

divisions that are in two different tenths' are 117 to 123, 124 to 130, 138 to 144, 145 to 151, 159 to 165, 166 to 172, 187 to 193, 194 to 200, 208 to 214, and 215 to 221. The 19 average divisions are 109 or less, 110 to 116, 117 to 123, 124 to 130, 131 to 137, 138 to 144, 145 to 151, 152 to 158, 159 to 165, 166 to 172, 173 to 179, 180 to 186, 187 to 193, 194 to 200, 201 to 207, 208 to 214, 215 to 221, 222 to 228, and 229 or more.

The 8-pin average division is still very competitive with 83.33% of all bowlers competing within 0 to 4 pins of each other however nine divisions are in two different tenths' and the 17 average divisions are too many divisions dividing the prize fund. All of the divisions start (0,8,6,4,2) and end (7,5,3,1,9) with five different last digits making it more difficult for the bowlers to remember where their average division is located. (EXAMPLE) In the 110 to 117 average-division there are 8 matches with a zero-pin difference, 7 matches with a one-pin difference, 6 matches with a two-pin difference, 5 matches with a three-pin difference, 4 matches with a four-pin difference, 3 matches with a five-pin difference, 2 matches with a six-pin difference, and 1 match with a seven-pin difference adding to a total of 36 matches. [8(8+1)/2=36] There are 30 matches within a 0 to 4-pins difference (8+7+6+5+4=30) which is 83.33%(30/36=83.33%) of all the matches. The nine divisions that are in two different tenths' are 118 to 125,126 to 133, 134 141, 158 to 165, 166 to 173, 174 to 181, 198 to 205, 206 to 213, and 214 to 221. The 17 divisions are 109 or less, 110 to 117, 118 to 125, 126 to 133, 134 to 141, 142 to 149, 150 to 157, 158 to 165, 166 to 173, 174 to 181, 182 to 189, 190 to 197, 198 to 205, 206 to 213, 214 to 221, 222 to 229, and 230 or more.

The 9-pin average division is competitive with 77.78% of all bowlers competing within 0 to 4 pins of each other however ten divisions are in two different tenths' which is 66% of all the divisions. The 15 divisions are the most divisions acceptable in dividing the prize fund. All of the

divisions start (0,9,8,7,6,5,4,3,2,1) and end (8,7,6,5,4,3,2,1,0,9) with ten different last digits making it more difficult for the bowlers to remember where their average division is located. (EXAMPLE) In the 200 to 208 average-division there are 9 matches with a zero-pin difference, 8 matches with a one-pin difference, 7 matches with a two-pin difference, 6 matches with a three-pin difference, 5 matches with a four-pin difference, 4 matches with a five-pin difference, 3 matches with a six-pin difference, 2 matches with a seven-pin difference, and 1 match with an eight-pin difference adding to a total of 45 matches. [9(9+1)/2=45] There are 35 matches within a 0 to 4-pins difference (9+8+7+6+5=35) which is 77.78% of all the matches. The ten divisions that are in two different tenths' are 119 to 127, 128 to 136, 137 to 145, 146 to 154, 155 to 163, 164 to 172, 173 to 181, 182 to 190, 209 to 217, and 218 to 226. The 15 divisions are 109 or less, 110 to 118, 119 to 127, 128 to 136, 137 to 145, 146 to 154, 155 to 163, 164 to 172, 173 to 181, 182 to 190, 191 to 199, 200 to 208, 209 to 217, 218 to 226, and 227 or more.

The 10-pin average division is competitive with 72.72% of all bowlers competing within 0 to 4 pins of each other and 100% of all bowlers are competing within 0 to 9 pins of each other which is less than a full mark difference between competing bowlers. All of the divisions are in the same tenths'. The 14 divisions are acceptable but still close to being too many. All of the divisions start (0) and end (9) with only one last digit making this the 10-pin average division the easiest division for the bowlers to remember where their average division is located. (EXAMPLE) In the 200 to 209 average division there are 10 matches with a zero-pin difference, 9 matches with a one-pin difference, 8 matches with a two-pin difference, 7 matches with a three-pin difference, 6 matches with a four-pin difference, 5 matches with a five-pin difference, 4 matches with a six-pin difference, 3 matches with a seven-pin difference, 2 matches with an eight-pin difference, and 1 match with a nine-pin difference adding to a total of 55 matches.

[10(10+1)/2=55] There are 40 matches within a 0 to 4 pins difference (10+9+8+7+6=40) which is 72.72% (40/55=72.72%) of all the matches. There are 55 matches within a 0 to9 difference [10(10+1)/2=55] which is 100% (55/55=100%) of all the matches. The 14 average divisions are 109 or less, 110 to 119, 120 to 129, 130 to 139, 140 to 149, 150 to 159, 160 to 169, 170 to 179, 180 to 189, 190 to 199, 200 to 209, 210 to 219, 220 to 229, and 230 or more.

The 11-pin average division is still competitive with 68.18% of all bowlers competing within 0 to 4 pins of each other and 98.48% of all bowlers are competing within 0 to 9 pins of each other which is less than a full mark difference between competing bowlers. The 13 divisions are acceptable but still close to being too many. However all of the divisions are in two different tenths' which is not as good as having all of the divisions in the same tenth. All of the divisions start (0,1,2,3,4,5,6,7,8,9) and end (0,1,2,3,4,5,6,7,8,9) with ten different last digits making it more difficult for the bowlers to remember where their average division is located. (EXAMPLE) In the 110 to 120 average division there are 11 matches with a zero-pin difference, 10 matches with a one-pin difference, 9 matches with a two-pin difference, 8 matches with a three-pin difference, 7 matches with a four-pin difference, 6 matches with a five-pin difference, 5 matches with a six-pin difference, 4 matches with a seven-pin difference, 3 matches with an eight-pin difference, 2 matches with a nine-pin difference, and 1 match with a ten-pin difference adding to a total of 66 matches. [11(11+1)/2=66] There are 45 matches within a 0 to 4 pins difference (11+10+9+8+7=45) which is 68.18% (45/66=68.18%) of all the matches. There are 65 matches with a 0 to 9 pin difference (11+10+9+8+7+6+5+4+3+2=65) which is 98.48% (65/66=98.48%) of all the matches. The 13 average divisions are 109 or less, 110 to 120, 121 to 131, 132 to 142, 143 to 153, 154 to 164, 165 to 175, 176 to 186, 187 to 197, 198 to 208, 209 to 219, 220 to 230, and 231 or more.

The 12-pin average division is still competitive with 64.1% of all bowlers competing within 0 to 4 pins of each other and 96.15% of all bowlers competing within 0 to 9 pins of each other which is less than a full mark difference between competing bowlers. The 12 divisions are acceptable. However all of the divisions are in two different tenths'. All of the divisions start (2,4,6,8,0) and end (1,3,5,7,9) with five different last digits making it more difficult for the bowlers to remember where their average division is located. (EXAMPLE) In the 110 to 121 average division there would be 12 matches with a zero-pin difference, 11 matches with a one-pin difference, 10 matches with a two-pin difference, 9 matches with a three-pin difference, 8 matches with a four-pin difference, 7 matches with a five-pin difference, 6 matches with a six-pin difference, 5 matches with a seven-pin difference, 4 matches with an eight-pin difference, 3 matches with a nine-pin difference, 2 matches with a ten-pin difference, and 1 match with an eleven-pin difference adding to a total of 78 matches. [12(12+1)/2=78] There are 50 matches within a 0 to 4 pins difference (12+11+10+9+8=50) which is 64.1% (50/78=64.1%) of all the matches. There are 75 matches within a 0 to 9 pins difference [10(12+3)/2=75] which is 96.15% (75/78=96.15%) of all the matches. The 12 average divisions are 109 or less, 110 to 121, 122 to 133, 134 to 145, 146 to 157, 158 to 169, 170 to 181, 182 to 193, 194 to 205, 206 to 217, 218 to 229, and 230 or more.

The 13-pins average division is still competitive with 60.44% of all bowlers competing within 0 to 4 pins of each other and 93.41% of all bowlers competing within 0 to 9 pins of each other which is less than a full mark difference between competing bowlers. The 11 divisions are acceptable. However all of the divisions are in at least two different tenths' while one division is in three different tenths'. All of the divisions start (0,3,6,9,2,5,8,1,4) and end (2,5,8,1,4,7,0,3,6) with nine different last digits making it more difficult for the bowlers to remember where their

average division is located. (EXAMPLE) In the 110 to 122 average division there are 13 matches with a zero-pin difference, 12 matches with a one-pin difference, 11 matches with a two-pin difference, 10 matches with a three-pin difference, 9 matches with a four-pin difference, 8 matches with a five-pin difference, 7 matches with a six-pin difference, 6 matches with a seven-pin difference, 5 matches with an eight-pin difference, 4 matches with a nine-pin difference, 3 matches with a ten-pin difference, 2 matches with an eleven-pin difference, and 1 match with a twelve-pin difference adding to a total of 91 matches. [13(13+1)/2=91] There are 55 matches within a 0 to 4 pins difference (13+12+11+10+9=55) which is 60.44% (55/91=60.44%) of all the matches. There are 85 matches within a 0 to 9 pins difference [10(13+4)/2=85] which is 93.41% (85/91=93.41%) of all the matches. The 11 average divisions are 109 or less, 110 to 122, 123 to 135, 136 to 148, 149 to 161, 162 to 174, 175 to 187, 188 to 200, 201 to 213, 214 to 226, and 227 or more.

The 14-pins average division is less competitive with 57.14% of all bowlers competing within 0 to 4 pins of each other and 90.48% of all bowlers competing within 0 to 9 pins of each other which is less than a full mark difference between competing bowlers. The 10 divisions are very acceptable. However all of the divisions are in at least two different tenths' while three divisions are in three different tenths'. All of the divisions start (5,9,3,7,1) and end (8,2,6,0,4) with five different last digits making it more difficult for the bowlers to remember where their average division is located. (EXAMPLE) In the 199 to 212 average division there are 14 matches with a zero-pin difference, 13 matches with a one-pin difference, 12 matches with a two-pin difference, 11 matches with a three-pin difference, 10 matches with a four-pin difference, 9 matches with a five-pin difference, 8 matches with a six-pin difference, 7 matches with a seven-pin difference, 6 matches with an eight-pin difference, 5 matches with a nine-pin difference, 4

matches with a ten-pin difference, 3 matches with an eleven-pin difference, 2 matches with a twelve-pin difference, and 1 match with a thirteen-pin difference adding to a total of 105 matches. [14(14+1)/2=105] There are 60 matches (14+13+12+11+10=60) within a 0 to 4 pins difference which is 57.14% (60/105=57.14%) of all the matches. There are 95 matches [10(14+5)/2=95] within a 0 to 9 pins difference which is 90.48% (95/105=90.48%) of all the matches. The 10 average divisions are 114 or less, 115 to 128, 129 to 142, 143 to 156, 157 to 170, 171 to 184, 185 to 198, 199 to 212, 213 to 226, and 227 or more.

The 15-pin average division is less competitive with 54.17% of all bowlers competing within 0 to 4-pins of each other and 87.5% of all bowlers competing within 0 to 9-pins of each other which is less than a full mark difference between competing bowlers. The 10 divisions are very acceptable. However all of the divisions are in two different tenths'. All of the divisions start (0,5) and end (4,9) with only two different last digits making it less difficult for the bowlers to remember where their average division is located. (EXAMPLE) In the 200 to 214 average division there are 15 matches with a zero-pin difference, 14 matches with a one-pin difference, 13 matches with a two-pin difference, 12 matches with a three-pin difference, 11 matches with a four-pin difference, 10 matches with a five-pin difference, 9 matches with a six-pin difference, 8 matches with a seven-pin difference, 7 matches with an eight-pin difference, 6 matches with a nine-pin difference, 5 matches with a ten-pin difference, 4 matches with an eleven-pin difference, 3 matches with a twelve-pin difference, 2 matches with a thirteen-pin difference, and 1 match with a fourteen-pin difference adding to a total of 120 matches. [15(15+1)/2=120] There are 65 matches (15+14+13+12+11=65) with a 0 to 4 pins difference which is 54.17% (65/120=54.17%) of all the matches. There are 105 matches [10(15+6)/2=105] with a 0 to 9 pins difference which is 87.5% (105/120=87.5%) of all the matches. The 10 average divisions are 109

or less, 110 to 124, 125 to 139 140 to 154, 155 to 169, 170 to 184, 185 to 199, 200 to 214, 215 to 229, and 230 or more.

The 16-pin average division is less competitive with 51.47% of all bowlers competing within 0 to 4-pins of each other and 84.56% of all bowlers competing within 0 to 9-pins of each other which is less than a full mark difference between competing bowlers. The 9 divisions are very acceptable. However all of the divisions are in at least two different tenths' while four divisions are in three different tenths'. All of the divisions start (5,1,7,3,9) and end (0,6,2,8,4) with five different last digits making it more difficult for the bowlers to remember where their average division is located. (EXAMPLE) In the 115 to 130 average division there are 16 matches with a zero-pin difference, 15 matches with a one-pin difference, 14 matches with a two-pin difference, 13 matches with a three-pin difference, 12 matches with a four-pin difference, 11 matches with a five-pin difference, 10 matches with a six-pin difference, 9 matches with a seven-pin difference, 8 matches with an eight-pin difference, 7 matches with a nine-pin difference, 6 matches with a ten-pin difference, 5 matches with an eleven-pin difference, 4 matches with a twelve-pin difference, 3 matches with a thirteen-pin difference, 2 matches with a fourteen-pin difference, and 1 match with a fifteen-pin difference adding to a total of 136 matches. [16(16+1)/2=136] There are 70 matches (16+15+14+13+12=70) within a 0 to 4 pins difference which is 51.47% (70/136=51.47%) of all the matches. There are 115 matches [10(16+7)/2=115] within a 0 to 9 pins difference which is 84.56% (115/136=84.56%) of all the matches. The 9 average divisions are 114 or less, 115 to 130, 131 to 146, 147 to 162, 163 to 178, 179 to 194, 195 to 210, 211 to 226, and 227 or more.

The 17-pin average division less competitive with 49.02% of all the bowlers competing within 0 to 4 pins of each other and 81.7% of all bowlers competing within 0 to 9 pins of each

other which is less than a full mark difference between competing bowlers. The 9 divisions are very acceptable. However all of the divisions are in at least two different tenths' while four divisions are in three different tenths'. All of the divisions start (0,7,4,1,8,5,2) and end (6,3,0,7,4,1,8) with seven different last digits making it more difficult for the bowlers to remember where their average division is located. (EXAMPLE) In the 110 to 126 average division there are 17 matches with a zero-pin difference, 16 matches with a one-pin difference, 15 matches with a two-pin difference, 14 matches with a three-pin difference, 13 matches with a four-pin difference, 12 matches with a five-pin difference, 11 matches with a six-pin difference, 10 matches with a seven-pin difference, 9 matches with an eight-pin difference, 8 matches with a nine-pin difference, 7 matches with a ten-pin difference, 6 matches with an eleven-pin difference, 5 matches with a twelve-pin difference, 4 matches with a thirteen-pin difference, 3 matches with a fourteen-pin difference, 2 matches with a fifteen-pin difference, 1 match with sixteen-pin difference adding to a total of 153 matches. [17(17+1)/2=153] There are 75 matches (17+16+15+14+13=75) within a 0 to 4 pins difference which is 49.02% (75/125=49.02%) of all the matches. There are 125 matches [10(17+8)/2=125] within a 0 to 9 pins difference which is 81.7% (125/153=81.7%) of all the matches. The 9 average divisions are 109 or less, 110 to 126, 127 to 143, 144 to 160, 161 to 177, 178 to 194, 195 to 211, 212 to 228, and 229 or more.

The 18-pin average division is even less competitive with competitive with 46.78% of all bowlers competing within 0 to4 pins of each other and 78.95% of all bowlers competing within 0 to9 pins of each other which is less than a full mark difference between competing bowlers. The 8 divisions are excellent. However all of the divisions are in at least two different tenths' while three divisions are in three different tenths'. All of the divisions start (0,8,6,4,2) and end (7,5,3,1,9) with five different last digits making it more difficult for the bowlers to remember

where their average division is located. (EXAMPLE) In the 110 to 127 average division there are 18 matches with a zero-pin difference, 17 matches with a one-pin difference, 16 matches with a two-pin difference, 15 matches with a three-pin difference, 14 matches with a four-pin difference, 13 matches with a five-pin difference, 12 matches with a six-pin difference, 11 matches with a seven-pin difference, 10 matches with an eight-pin difference, 9 matches with a nine-pin difference, 8 matches with a ten-pin difference, 7 matches with an eleven-pin difference, 6 matches with a twelve-pin difference, 5 matches with a thirteen-pin difference, 4 matches with a fourteen-pin difference, 3 matches with a fifteen-pin difference, 2 matches with a sixteen-pin difference, and 1 match with a seventeen-pin difference adding to a total of 171 matches. [18(18+1)/2=171] There are 80 matches (18+17+16+15+14=80) within a 0 to 4 pins difference which is 46.78% (80/171=46.78%) of all the matches. There are 135 matches [10(18+9)/2=135] within a 0 to 9 pins difference which is 78.95% (135/171=78.95%) of all the matches. The 8 average divisions are 109 or less, 110 to 127, 128 to 145, 146 to 163, 164 to 181, 182 to 199, 200 to 217, and 218 or more.

The 19-pin average division is not competitive enough with 44.74%of all bowlers competing within 0 to 4 pins of each other and 76.32% of all bowlers competing within 0 to 9 pins of each other which is less than a full mark difference between competing bowlers. The 8 divisions are excellent. However all of the divisions are in at least two different tenths' while five divisions are in three different tenths'. All of the divisions start (0,9,8,7,6,5) and end (8,7,6,5,4,3) with six different last digits making it more difficult for the bowlers to remember where their average division is located. (EXAMPLE) In the 110 to 128 average division there are 19 matches with a zero-pin difference, 18 matches with a one-pin difference, 17 matches with a two-pin difference, 16 matches with a three-pin difference, 15 matches with a four-pin

difference, 14 matches with a five-pin difference, 13 matches with a six-pin difference, 12 matches with a seven-pin difference, 11 matches with an eight-pin difference, 10 matches with a nine-pin difference, 9 matches with a ten-pin difference, 8 matches with an eleven-pin difference, 7 matches with a twelve-pin difference,6 matches with a thirteen-pin difference, 5 matches with a fourteen-pin difference, 4 matches with a fifteen-pin difference, 3 matches with a sixteen-pin difference, 2 matches with a seventeen-pin difference, and 1 match with an eighteen-pin difference adding to a total of 190 matches. [19(19+1)/2=190] There are 85 matches (19+18+17+16+15=85) within a 0 to 4 pins difference which is 44.74% (85/190=44.74%) of all the matches. There are 145 matches [10(19+10)/2=145] within a 0 to 9 pins difference which is 76.32% (145/190=76.32%) of all the matches. The 8 average divisions are 109 or less, 110 to 128, 129 to 147, 148 to 166, 167 to 185, 186 to 204, 205 to 223, and 224 or more.

The 20-pin average division is not competitive enough with 42.86% of all bowlers competing within 0 to 4 pins of each other and 73.81% of all bowlers competing within 0 to 9 pins of each other which is less than a full mark difference between competing bowlers. The 8 divisions are excellent. However all of the divisions are in at least two different tenths'. All of the divisions start (0) and end (9) with only one last digit making this as easy as the 10-pin average division for bowlers to remember where their average division is located. (EXAMPLE) In the 110 to 129 average division there are 20 matches with a zero-pin difference, 19 matches with a one-pin difference, 18 matches with a two-pin difference, 17 matches with a three-pin difference, 16 matches with a four-pin difference, 15 matches with a five-pin difference, 14 matches with a six-pin difference, 13 matches with a seven-pin difference, 12 matches with an eight-pin difference, 11 matches with a nine-pin difference, 10 matches with a ten-pin difference, 9 matches with an eleven-pin difference, 8 matches with a twelve-pin difference, 7 matches with

a thirteen-pin difference, 6 matches with a fourteen-pin difference, 5 matches with a fifteen-pin difference, 4 matches with a sixteen-pin difference, 3 matches with a seventeen-pin difference, 2 matches with an eighteen-pin difference, and 1 match with a nineteen-pin difference adding to a total of 210 matches. [20(20+1)/2=210] There are 90 matches (20+19+18+17+16=90) within a 0 to 4 pins difference which is 42.86% (90/210=42.86%) of all the matches. There are 155 matches [10(20+11)/2=155] within a 0 to 9 pins difference which is 73.81% (155/210=73.81%) of all the matches. The 8 average divisions are 109 or less, 110 to 129, 130 to 149, 150 to 169, 170 to 189, 190 to 209, 210 to 229, and 230 or more.

For all these foregoing reasons, Applicant respectfully requests entry of the foregoing amendments, reconsideration of the present application in light thereof, and in light of the foregoing remarks, and then allowance of Applicant's claims 1-6, as amended, over all the prior art of record.

Respectfully submitted,

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